

**Form PTO-1449** (modified)

List of Patents and Publications

For Applicant's Information

Disclosure Statement

(Use several sheets if necessary)

PATENT DKT. NO. 5681-67300

APPLICANT: Robert E. Cypher

FILING DATE: October 30, 2003

SERIAL NO. 10/696,891

GROUP: 2131

**FOREIGN PATENT DOCUMENTS**

EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO

**OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

	A7	Barker et al. "ASCII Table," <a href="http://www.eng2.uconn.edu/cse/Cour...08W/References/Ref_ASCII.html">http://www.eng2.uconn.edu/cse/Cour...08W/References/Ref_ASCII.html</a> , February 1998, 1 pg.
	A8	"Parity & Computing parity," <a href="http://bbs-koi.uniinc.msk.ru/tech1/1994/er_cont/parity.htm">http://bbs-koi.uniinc.msk.ru/tech1/1994/er_cont/parity.htm</a> , 1994, 2 pgs.
	A9	"Error Correction with Hamming Codes," <a href="http://bbs-koi.uniinc.msk.ru/tech1/1994/er_cont/hamming.htm">http://bbs-koi.uniinc.msk.ru/tech1/1994/er_cont/hamming.htm</a> , 1994, 2 pgs.
	A10	Barker et al. "Hamming Code, Background Information," <a href="http://www.eng2.uconn.edu/cse/Courses/CSE208W/Hamming/Background.html">http://www.eng2.uconn.edu/cse/Courses/CSE208W/Hamming/Background.html</a> , February 1998, 3 pgs.
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	A12	"NUMA: Delivering the Next Level of Commodity SMP Performance," <a href="http://199.245.235.23/newsletters/html/vpoint5.html">http://199.245.235.23/newsletters/html/vpoint5.html</a> , 1996, 4 pgs.
	A13	Barker et al. "General Definitions," <a href="http://www.eng2.uconn.edu/cse/Cour...8W/References/Ref_Definitions.html">http://www.eng2.uconn.edu/cse/Cour...8W/References/Ref_Definitions.html</a> , February 1998, 3 pgs.
	A14	Barker et al. "Hamming Code, Lab Procedure," <a href="http://www.eng2.uconn.edu/cse/Courses/CSE208W/Hamming/Procedure.html">http://www.eng2.uconn.edu/cse/Courses/CSE208W/Hamming/Procedure.html</a> , June 1998, 3 pgs.
	A15	Burskirk, "32-Bit-Wide Memory Tolerates Failures," NT Tech Notes, October 1990, p. 818.
	A16	C. L. Chen, "Symbol Error Correcting Codes for Memory Applications," IBM Corporation, IEEE, 1996, pages 200-207.
	A17	IEEE Transactions of Computers, Vol. 41, No. 2, February 1992, 5 pages.
	A18	Hamada, et al., "A Class of Error Control Codes for Byte Organized Memory Systems -SbEC-(Sb+S)ED Codes-," IEEE Transactions of Computers, Vol. 46, No. 1, January 1997, 5 pages.
	A19	Costello, Jr., et al., "Applications of Error-Control Coding," IEEE Transactions on Information Theory, Vol. 44, NO. 6, October 1998, pages 2531-2560.
	A20	Ziegler, et al., "Cosmic Ray Soft Error Rates of 16-Mb DRAM Memory Chips," IEEE Journal of Solid-State Circuits, Vol. 33, No. 2, February 1998, pages 246-252.
	A21	Peterson, et al., "Error-Correcting Codes," Second Edition, The MIT Press, 1972, pages 357-373.
	A22	Shu Lin, "Error Control Coding, Fundamental and Applications," Prentice-Hall, 1983, pp. 503-525 and 532.

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	A19	Costello, Jr., et al., "Applications of Error-Control Coding," IEEE Transactions on Information Theory, Vol. 44, NO. 6, October 1998, pages 2531-2560.
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/Guy Lamarre/ (06/25/2006)

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Information Disclosure Statement--PTO 1449 (modified)


**Information Disclosure Statement--PTO 1449 (modified)**



## ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

<b>Title of Invention</b>	<b>ECC for Component Failures Using Galois Fields</b>																				
<p>Application Number: 10/696891 </p> <p>Confirmation Number: 9249</p> <p>First Named Applicant: Robert Cypher</p> <p>Attorney Docket Number: 5681-67300</p> <p>Art Unit: 2131</p> <p>Search string: ( 5812564 ).pn.</p> <p><b>US Patent Documents</b></p> <p>Note: Applicant is not required to submit a paper copy of cited US Patent Documents</p> <table border="1"><thead><tr><th>init</th><th>Cite.No.</th><th>Patent No.</th><th>Date</th><th>Patentee</th><th>Kind</th><th>Class</th><th>Subclass</th></tr></thead><tbody><tr><td>GL</td><td>1</td><td>5812564</td><td>1998-09-22</td><td>Bonke et al</td><td></td><td></td><td></td></tr></tbody></table> <p><b>Signature</b></p> <table border="1"><thead><tr><th>Examiner Name</th><th>Date</th></tr></thead><tbody><tr><td>/Guy Lamarre/ (06/25/2006)</td><td></td></tr></tbody></table>		init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass	GL	1	5812564	1998-09-22	Bonke et al				Examiner Name	Date	/Guy Lamarre/ (06/25/2006)	
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<b>U.S. PATENT DOCUMENTS</b>							
EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	E1	2001/0001158	5/10/01	Tetrick			
	E2	6246616	6/12/01	Nagai, et al			
	E3	6233717	5/15/01	Choi			
	E4	6223301	4/24/01	Santeler, et al			
GL	E5	6209113	3/27/01	Roohparvar			
	E6	6181614	1/30/01	Aipperspach, et al			
	E7	6167495	12/26/00	Keeth, et al			
	E8	6158025	12/5/00	Brisse, et al			
	E9	6141789	10/31/00	Cypher			
	E10	6115828	9/5/00	Tsutsumi, et al			
	E11	6101614	8/8/00	Gonzales, et al			
	E12	6076182	6/13/00	Jeddeloh			
	E13	6065102	5/16/00	Peters, et al			
	E14	6044483	3/28/00	Chen, et al			
	E15	6070255	5/30/00	Dell, et al.			
	E16	6052818	4/18/00	Dell, et al			
	E17	6038680	3/14/00	Olarig			
	E18	6018817	1/28/00	Chen, et al			
	E19	6009548	12/28/99	Chen, et al			
	E20	5987628	11/16/99	Von Bokern, et al			
	E21	5978952	11/2/99	Hayek, et al			
	E22	5953265	9/14/99	Walton, et al			
	E23	5928367	7/27/99	Nelson, et al			
	E24	5923682	7/13/99	Seyyeddy			
	E25	5909541	6/1/99	Sampson, et al			
	E26	5872790	2/16/99	Dixon			
	E27	5822257	10/13/98	Ogawa			

/Guy Lamarre/ (06/25/2006)

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	E28	5758056	5/26/98	Barr			
	E29	5682394	10/28/97	Blake, et al			
	E30	5640353	6/17/97	Ju			
	E31	5502675	3/26/96	Kohno, et al			
	E32	5490155	2/6/96	Abdoo, et al			
	E33	5291496	3/1/94	Andaleon, et al			
	E34	5276834	1/4/94	Mauritz, et al			
GL	E35	5255226	10/19/93	Ohno, et al			
	E36	5233614	8/3/93	Singh			
	E37	5228046	7/13/93	Blake, et al			
	E38	5164944	11/17/92	Benton, et al			
	E39	5077737	12/31/91	Leger, et al			
	E40	5058115	10/15/91	Blake, et al			
	E41	4604751	8/5/86	Aichelmann, Jr., et al			
	E42	4584681	4/22/86	Singh, et al			
	E43	4376300	3/8/83	Tsang			
	E44	5,463,644	10-1995	Rodi et al.			
	E45	4,434,459	2-1984	Holland et al.			
	E46	6,505,305	1-2003	Olarig, Sompong P.			
	E47	2003/0093744	5-2003	Leung et al.			
	E48	2003/0163777	8-2003	Holt, Keith W.			
	E49	2003/0133611	12-2003	Humlicek et al.			
	E50	5,867,642	2/2/99	Vivio, et al.			
	E51	5,757,823	5/26/98	Chen, et al.			

**OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

GL	E52	Polianskikh, B. et al., "design and Implementation of Error Detection and Correction Circuitry for Multilevel Memory Protection," Multiple-Valued Logic 2000. ISMVL 2002. Proceedings 32 <sup>nd</sup> IEEE International Symposium on 5-18 May 2002, Pages 89-95
	E53	K. A. S. Immink, "A Practical Method for Approaching the Channel Capacity of Constrained Channels," September 1997, IEEE Transactions on Information Theory, Vol. 43, No. 5, Pages 1389-1399

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	F1	J. Zweig, et al., "TCP Alternate Checksum Options," March 1990, 5 pages.						
	F2	Craig Partridge, et al., "Performance of Checksums and CRCs over Real Data," 1995 ACM, pp. 68-76.						
	F3	Jonathan Stone, et al., "Performance of Checksums and CRC's over Real Data, 1998 IEEE, ACM Transaction on Networking, Vol. 6, No. 5, pp. 529-543.						
GL	F4	Anh Vu, "Error Detection and Error Correction," October 27, 1997, 7 pages.						
	F5	Anastase Nakassis, "Fletcher's Error Detection Algorithm: How to Implement it Efficiently and How to Avoid the Most Common Pitfalls," ACM SIGCOMM Computer Communication Review, Vol. 18, Issue 5, October 1998, pp. 63-88						
	F6	Anarchriz, "CRC and How to Reverse it: A CRC Tutorial & The c001 Way to Reverse CRC," April 1999, 14 pages.						
	F7	"Cyclic Redundancy Check," August 2, 1997, 1 pages.						
	F8	Eric Smith, "Memory Error Detection and Correction: An Introduction to Parity and ECC," 8/23/96, 2 pages.						
	F9	Timothy Hsu, "How to Select System Memory," January 9, 1999, 13 pages.						
	F10	"Memory Tutorial," 1998, 3 pages						
	F11	Satran, Sheinwald Informational, "iSCSI CRC Considerations," May 7, 2001, 18 pages.						
	F12	"A Short Spiel on 1-Bit Error Correction Codes," printed 8/11/01, 2 pages.						
	F13	Rick Kelly, "Error Management Using DesignWare CRC and ECC," 2001 Synopsys, Inc., 5 pages.						
	F14	ZDNet UK, "Parity RAM and ECC," PC Magazine Guide to Servers, 1999, 1 page.						
	F15	"Before you start - Chapter 6: Break and Verify," © Laurence Soucy 1997/2001, 1 page.						
	F16	"A Painless Guide to CRC Error Detection Algorithms," Version 3.00, 9/24/96, 19 pages.						
	F17	"Error Control Systems for Digital Communication and Storage," Stephen B. Wicker, Prentice Hall 1995, pages. 100-123.						

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